Cost Recovery of the National Family Planning Program and the Role of the Private Sector

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COST RECOVERY OF THE NATIONAL FAMILY PLANNING PROGRAMME AND THE ROLE OF THE PRIVATE SECTOR

by

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1. Introduction

This paper reviews issues related to cost recovery of the National Family Planning Programme and the role of the private sector in family planning. It draws mainly upon research findings from two projects, which the author directed, carried out by the Thailand Development Research Institute in cooperation with the Ministry of Public Health. These two projects were:

i) *The Demographic Transition and Reallocation of Health Budgets in Thailand,* funded by USAID through the University Research Corporation (URC), analyzed, proposed, and tested the re-pricing of family planning methods and services. The objective was to find out whether price restructuring of contraceptives could bring about more effective use of public subsidies for family planning. Analyses of the demand for contraceptives using previously existing cross-sectional data sets were carried out. These results were used to derive optimal pricing structures, based on alternative objectives, through a non-linear programming framework. The project also carried out field work to track the contraceptive choices of about 3,000 families in face of changes in family planning services in four provinces: Suphan Buri, Surin, Nakhon Sawan, and Nakhon Si Thammarat.

ii) *Costing of Public Provision of Family Planning and the Role of the Private Sector,* funded by USAID through the Enterprise Program, John Snow Inc., consisted of three major components. The first calculated the costs of public provision of family planning services by method in 20

provinces and Bangkok. The second assembled an inventory of private providers of family planning services in these same provinces. Finally, the last component explored alternative ways in which the scope of private sector involvement in family planning may be increased in some provinces, leading to cost saving for the government and without an adverse impact on contraceptive use.

The paper suggests that more cost-effective in family planning provisions could be achieved through re-pricing of public provisions and increasing the role of the private sector. Pilot projects ideas are suggested which could be carried out by the Ministry of Public Health.

Section 2 briefly discusses the need for more cost-effectiveness of family planning provision. Re-pricing of public provisions of family planning is discussed in section 3, and section 4 discusses more private role in family planning. Finally, section 5 suggests possible pilot projects to carry out.

2. National Family Planning Programme: Toward More Cost-Effectiveness

Since the National Family Planning Program (NFPP) was endorsed as national policy by the Third National Economic and Social Development Plan (1972-1976), the Program has virtually accomplished all of its targets. The annual rate of population growth declined from about 3.0% between 1960 and 1970, to 2.5% between 1970 and 1980, and 1.8% between 1980 and 1990. The total fertility rate dropped from over 6 in 1970 to 2.6 in 1985-90, a decline of more than 50% in one generation (see Table 2.1). In the late 1960s, only 15% of currently married women of reproductive age were practicing contraception. By 1984, the contraceptive prevalence level had increased to 65%, and only an estimated 6% had unmet needs (Third Contraceptive Prevalence Survey, 1984). Contraceptive use had further increased to 68% by 1987 (Thailand Demographic and Health Survey, 1987), a level that compares very favorably with that of other Asian countries, and also approaching that in developed countries (Table 2.2).

Table 2.1
Total Fertility Rate

YEAR	RATE
1960	6.63
1964-65	6.25
1970	6.09
1970-74	5.09
1974-76	4.90
1978-79	3.77
1980-85	3.30
1985-90	2.60

Source: TDRI "Population Policy Background Paper for the Sixth National Economic and Social Development Plan" and HRI ,Table 2.8, and HRPD, NESDB (1991), Table 1.

Table 2.2
Contraceptive Prevalence Rate: Selected Countries (1987)

	Percent
Canada /a	73
China	74
Germany	78
India	40
Indonesia	45
Japan /a	64
Philippines	44
South Korea	70
Sri Lanka	62
Thailand	**68**

Source: World Development Report, 1990 and 1991.
Note: /a Figure refers to 1986.

Given the above demographic changes, a good case can be made that the future focus of the NFPP should shift from a major emphasis on recruiting new acceptors (except in low prevalence areas such as in the Yawee speaking villages in the South and the hill tribes of the North) to improving the quality and cost-effectiveness of

contraceptive use. Indeed, an effort to improve the cost-effectiveness of the family planning programme is quite crucial in the light of the current situation. Firstly, Thailand's exceedingly successful family planning programme has resulted in the substantial scaling down of family planning foreign assistance to Thailand; for example, USAID assistance to the family planning program ended in 1989. Second, the Ministry of Public Health is being faced with an increased demand for medical care and curative services. Current leading causes of death are accidents, hearth disease, and cancer, while twenty years ago they were diarrhea, malaria, and dysentery. Obviously, these changing conditions will be accompanied by an increase in demand for curative services. In addition, the income elasticity of demand for medical care appears to be greater than one in all parts of the country, rural and urban (Myers, et. al. 1985: 59). Thus, as per capita income continues to grow, demand for health services is likely to accelerate. These changes are compounded by the spread of AIDS. Thus, it is clear that substantial resources will be required in the future to meet Thailand's health needs. Any improvement in cost-effectiveness of the National Family Planning Programme would help in freeing up resources for use in other health care services.

From the above, it appears that Thailand's critical family planning problem in the upcoming decades is to maintain, with limited resources, the success already attained by the NFPP. Two complementary approaches appear feasible for meeting this objective.

i) Selective re-pricing of public provisions of family planning.
ii) More private participation in family planning provisions and selective exit of the public sector.

These are discussed in more detailed in the following sections.

3. Re-pricing of Public Provision of Family Planning

Research results from the project on "The Demographic Transition and Reallocation of Health Budgets in Thailand" have shown that there are much potential for

cost saving on public provision of family planning through re-pricing (or increasing "donations" asked from users). The analyses consisted of two steps:

i) Investigation of the determinants of contraceptive method choice, and
ii) Non-linear programming analysis, based on the determinants of contraceptive method choice, of optimal contraceptive pricing structure for various objectives.

The basic idea is that total public resource input into family planning can be reduced without reducing contraceptive prevalence through price re-structuring. This will be possible if prices charged for various contraceptives take into account the demand elasticities for contraceptives (the usual Ramsey's principal in economics).[1] The results of the analyses are briefly described below.[2]

3.1 Determinants of Contraceptive Method Choice

In order to investigate how socioeconomic factors affect contraceptive choice, a mixed conditional multinomial logit model of contraceptive choice was constructed based on the hypothesis that the demand for a particular method of contraception is a function of its price; the prices of alternative methods (where price includes both monetary outlay and non-monetary access costs such as travel and waiting time); and individual preferences for different methods. Various control variables such as age, education, region of residence, working status, and individual preference toward ideal family size were used as proxies for contraceptive method preference.[3]

The analysis of contraceptive choice was based on a sample of 7,576 currently married women between the ages of 15-49 from the Third Contraceptive Prevalence

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1 Ramsey (1927).
2 This part is mostly from Ashakul (1989), see also Ashakul (1988).
3 The model was similar to that by Akin and Schwartz (1986), though with significant improvement in methodology to allow addressing the question of optimum price structure. See Ashakul (1988).

Survey, 1984 (Kamnuansilpa and Chamratrithirong, 1985). The samples of women in rural and urban areas were analyzed separately due to potential differences in contraceptive behavior. Contraceptive method was disaggregated into nine categories according to existing contraceptive method and source structures. These are: (1) the public pill; (2) the private pill; (3) the condom; (4) public injection; (5) private injection; (6) the IUD; (7) female sterilization; (8) natural method; and (9) no method. Because the proportion of publicly-provided condoms, privately provided IUDs, and privately provided female sterilization is low, these methods were not separated into public and private source.

In general, the model was quite robust in explaining the contraceptive method choice behavior of Thai women. In so far as price effects are concerned, own-price elasticities of all contraceptive services at all prices are negative and inelastic (see Table 3.1). In other words, an increase in the price of a particular type of contraception will reduce the likelihood of that method being used, but the magnitude of that reduction appears to be small. Female sterilization and the IUD have the lowest elasticities followed by the publicly-provided pill. Their elasticities, ranging from -.02 to -.09, suggest that the impact of price changes on the use of these methods would be almost nil.

For brevity, the many of the results from the estimates, such as the impact of time cost, or the characteristics of the choosers are not described here. However, one important result from the estimates is that the effect of women's desire to have additional children on their decision to accept female sterilization is very significant and powerful. In fact, of the impact of various socioeconomic factors on contraceptive choice, the effect of women's desire to have more children on their decision to accept female sterilization **is the strongest**. These estimates suggest that the shift of contraceptive use toward female sterilization, the most important historical trend in contraceptive choice in Thailand of the last decade, may be primarily due to a change in Thai's women's ideal family size preference - toward a reduced family size.

Table 3.1
Price Elasticities of Different Contraceptive Methods

Method		
	Non-municipal	Municipal
Public Pill	-0.040	-0.085
Private Pill	-0.262	-0.189
Condom	-0.238	-0.256
Public Injectable	-0.249	-0.122
Private Injectable	-0.313	-0.261
IUD	-0.022	-0.042
Sterilization	-0.022	-0.039

Note: Price Elasticities were calculated with all independent variables set at mean values

3.2 Optimum Contraceptive Pricing Structure

The price elasticity estimates presented in Table 3.1 above in conjunction with tain assumptions on the (average) prices that women pay for various contraceptive thods and the cost of provision per unit of family planning program output were used :onstruct a non-linear optimization program.[4] The program was used to determine optimum family planning subsidy structure - a structure which would utilize limited ources to subsidize different types of contraceptive services most effectively. A nber of experiments can be carried out. The experiment that is described here lressed the following question: if the contraceptive price is optimally set, by how ch can the public sector reduce the net public resource input of the family planning gram without affecting over-all effective protection? Thus, the objective of this

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)ue to lack of data at the time when the analyses were carried out, the private market prices of the pill, ctables, IUD, and female sterilization were used as proxies for the public cost of these services. In the ect on "Costing of Public Provision of Family Planning and the Role of the Private Sector," the public vision costs of family planning were calculated (see below).

experiment was to minimize the net public resource input of the family planning program while holding total effective protection constant.[5]

Table 3.2 presents the results for this experiment. In the initial situation there were 7.029 units of effective protection, with about 32.5% accounted for by sterilization, and about 27.3% by public pill. Prices that users have to pay (or donated) per monthly protection varied quite a lot by method, with the highest being for injectables, and the lowest for IUD. If net public resources input are minimized, while maintaining total effective protection, the price structure has to change significantly. The prices of (or donations for) the publicly-provided pill, IUD, and sterilization must be raised. The steepest price increase is for the pill - from around 3 baht and 5.7 baht per month in non-municipal and municipal areas, respectively, to 12 baht in both areas. On the other hand, the price for injectables should be reduced, from 16.43 baht per monthly protection to 4.36 baht in non-municipal areas, and from 8.21 baht to 1.65 baht in municipal areas.

The results show that the net public resource input can be reduced by almost 26%, from an estimated baht 54 million to baht 40 million per month (or a total reduction of baht 168 million per year), without affecting effective contraceptive protection. This is made possible because, as a result of price restructuring, some women switch from costly and less effective methods to more effective ones and, to a lesser extent, from public to private sources.

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5. The net family planning public resource input is defined as total family planning expenditure minus total receipts from the users (direct charge and/or service charge). The effective protection of a particular contraceptive method was defined as the total number of users of that method multiplied by the method's effectiveness coefficient. A perfectly effective method has an effectiveness coefficient value of one while a perfectly ineffective method has the effectiveness coefficient value of zero. Specifically, it was assumed that the effective coefficients of the pill, injectables, IUD, sterilization, condom, natural method (rhythm and withdrawal), and no method were 0.90, 0.9975, 0.95, 0.996, 0.83, 0.70, and 0.0, respectively.

Table 3.2
Optimization Program Results under the "Minimizing Family Planning Net Public Resource Input" Objective, 1988/a

		Initial		Minimize Net Public Resource Input		
		Effective	Net Public		Effective	Net Public
Method	Price	Protection	Resource Inp.	Price	Protection	Resource Inp.
	(Baht)	(000)	(000 Baht)	(Baht)	(000)	(000 Baht)
Non-municipal						
Public Pill	2.99	1,710	27,568	12.00	1,501	9,171
Public Injectable	16.43	578	2,014	4.36	743	11,579
Public IUD	1.26	623	2,845	2.90	625	1,777
Sterilization	1.63	1,839	13,971	2.94	1,856	11,665
Private Pill		402			416	
Private Injectable		246			255	
Condom		93			96	
Natural Method		52			54	
No Method		0			0	
Sub-total		5,543	46,398		5,545	34,192
Municipal						
Public Pill	5.74	208	2,717	12.00	208	1,169
Public Injectable	8.21	145	1,695	1.65	145	3,011
Public IUD	2.52	116	375	2.92	116	329
Sterilization	2.92	444	2,804	5.92	444	1,411
Private Pill		391			391	
Private Injectable		71			71	
Condom		85			85	
Natural Method		26			26	
No Method		0			0	
Sub-total		1,486	7,591		1,486	5,921
Total		7,029	53,989		7,029	40,113

Note: a/ The projected number of contraceptive users by method in 1988 was based on the assumption that the contraceptive use structure in 1988 would be the same as observed in 1984 (CPS3), and that the population in non-municipal and municipal areas would increase at an average annual rate of 1.68% and 2.61%, respectively, during 1984-88.

3.3 Conclusions

The above results show that, with appropriate choices of price structures for contraceptives, it is possible to reduce the net public resource input significantly while maintaining total effective protection. These results appeared to be confirmed through field work that tracked the contraceptive choices of about 3,000 families in face of changes in family planning services in four provinces: Suphan Buri, Surin, Nakhon Sawan, and Nakhon Si Thammarat. In cooperation with the Family Health Division,

surveys were carried out on the contraceptive use patterns of these families, prices (donations) for contraceptives were increased, and the pattern of contraceptive used was followed over a period of about 1 year. The surveys seemed to indicate that relatively few switches occurred as a result of the price increases, and when these did occurred, almost none switched from prior use of contraceptive to non-use. Thus, the potential for cost-recovery through re-pricing appears to be very high.

4. Enhancing the Private Sector Role[6]

The increasing income and urbanization in the process of socioeconomic development would facilitate a shift from reliance on public sources of family planning services to private sources, especially private clinics and hospitals. This is evident in the much higher income elasticity of expenditures for private sources compared to that for public ones (2.6 versus 1.5) -- see Ogawa et al. (1988).

While much of the success of family planning in Thailand in the last decades was due to government efforts to expand the availability of contraceptives, the private sector has also contributed. About 20% of users get contraceptives from private sources. Table 4.1 shows, however, that the private share has been declining over time, from about 23% in 1978 to about 18% in 1987. On the other hand, if one examines the private share by different types of contraceptives, it can be seen (Table 4.2) that, generally, there is an increasing share for the private sector in the provisions of pills and female sterilization, and the share of the private sector for injectables appeared to be increasing up to the mid 1980s.[7]

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6 Sections 4 and 5 are mainly from TDRI (1991).

7 Due to the relatively small samples in these surveys, the numbers are probably only rough estimates of the situation for the whole kingdom.

Table 4.1
Percentage Distribution of Current Users of Contraceptive by Source

Source	1978	1981	1984	1987
	CPS1	CPS2	CPS3	CUPS
Public	76.9	78.2	79.6	82.2
Private	23.1	21.8	20.4	17.8
Total	100.0	100.0	100.0	100.0

Source: CPS1-CPS3 from Kamnuansilpa and Chamratrithirong (1985), CUPS from Leoprapai and Thongthai (1989). Taken from IPSR/HRS (1991).

Table 4.2
Percent Private Share by Contraceptive Method

Method	1978	1981	1984	1987
	CPS1	CPS2	CPS3	CUPS
Female Sterilization	4.5	4.4	10.9	8.6
Male Sterilization	43.3	27.2	26.5	21.1
Pills	26.2	34.8	28.1	30.4
IUD	19.3	3.9	7.2	3.2
Injectables	23.5	26.6	27.1	17.8
Condom	70.1	76.9	63.4	56.1
All Methods	23.1	21.8	20.4	17.8

Source: As for Table 4.1.

The potential for further increase in the role of the private sector in family planning provision appears to be present. The acceptors of private family planning indicated in the above tables are doing so in spite of paying much higher prices compared to those charged by public sources (about 150, 250, and 50 percent higher for pills, condoms, and injectable respectively according to CPS3). Ashakul (1988)'s estimates of price and access-cost elasticities by method showed that the demand for resupply methods from

private sources in both rural and urban areas are found to be inelastic not only in prices, but also in access costs. Thus, even if prices were higher, most of those who use private sources would continue to do so. The optimization experiment reported in the last section also indicated that users could switch from public to private sources of family planning with re-pricing of public sources.

Research findings from the project on "Costing of Public Provision of Family Planning and the Role of the Private Sector," lend further support to the benefit of further private participation in family planning delivery. In the project, various components of public costs of providing family planning services by method and by type of delivery services were calculated from detailed data collected from 8 public delivery services (i.e., 1 provincial public-health center, 1 provincial hospital, 2 district hospitals, and 4 subdistrict public-health centers) in each of the 20 sample provinces all over the country (totaling 160 delivery services). As for the Bangkok Metropolitan Area (BMA), which is the 21st sample province, data were collected from 8 public delivery services (i.e., 1 BMR's public-health center in each of the 6 sample districts of the BMR and 2 BMR's hospitals). Data on private prices of family planning services were collected from 10 private drug stores and 5 private clinics in each of the 20 sample provinces (totaling 200 drug stores and 100 clinics). The same sample numbers of private drug stores and clinics also applied to each of the BMR's 6 sample districts (totaling 60 drug stores and 30 clinics). (See IPSR/HRS, 1991)

Using these survey data, Table 4.3 gives comparisons between public average costs and average private prices per item or per service by method. The table indicates that the former are higher than the latter for all methods except for condoms. Thus, it would be cheaper for the private sector, compared to the public sector, to assume the major role in providing family planning. This is likely to be true even for condoms. Although the average private prices of one piece of condom provided by private drug stores and clinics are higher than the average public costs, the differences are not very high. The higher average private prices reflect the fact that the condoms provided by many private outlets consist of higher-quality and higher-priced brands compared to the generic kind provided by the public sector. If the private outlets sell the generic type of

condom, which can be purchased at bulk price, the market price is likely to be less than the public price.

Table 4.3
Public Average Cost and Average Private Price for Contraceptives, 1990

		Average Private Sector Price	
	Public Avg. Cost	Drugstore	Private Clinic
Female Sterilization	1,253	-	942
Male Sterilization	1,177	-	391
Pill	28	21	31
IUD	474	-	222
Injectable	85	-	64
Condom	5	9	7

Source: IPSR/HRS (1991), Table 24.
Note: Cost or price is per one item or service.

As regards pills, between private drug stores and clinics, the former should be encouraged to provide more pills to the target groups since the results point to the much lower average private price per cycle provided by drug stores compared to that provided by clinics and compared to the public average cost. The data also show that the number of drug stores in the sample provinces is twice as high as the number of clinics and that the former are more popular among users of temporary or non-clinical methods than the latter.

More interestingly, the findings also reveal that the average private prices per service of clinical methods are far below their corresponding public average costs. For instance, the average private price per service of male sterilization accounts for only 33.2 percent of its average public costs. The percentages are 46.8, 75.2, and 75.3 for IUD, female sterilization, and injectable respectively. Privatization of these methods are therefore justified on the efficiency ground and should be strongly encouraged.

On equity ground, however, it might be argued that the government should continue subsidizing family planning for the poor, who have no ability to pay. However,

even if this were the case, much possibility exists for cost recovery or more private provisions for target groups that are willing to pay more for family planning. It should also be noted that even the poor are usually willing to contribute some "donations" for family planning services, because for most families in Thailand family planning is regarded as a basic necessity.

5. Pilot Project Ideas for Cost-Recovery and Increasing the Role of the Private Sector[8]

The Thai government is already convinced of the cost savings if family planning services are privatized to a greater extent. The next step is to search for some effective ways for privatizing them, while maintaining or increasing the existing high contraceptive prevalence rates (CPR). This section suggests some possible pilot projects that could be carried out. The following four broad pilot project ideas are suggested:

i) Sub-contracting with private providers;
ii) MOPH's bulk purchase of supplies of some non-clinical methods (e.g., pills and condoms) and reselling them at the same bulk prices plus handling to private providers;
iii) Reducing government subsidies or requesting higher contributions (re-pricing) from users for family planning services provided by the public sector (e.g., by public hospitals, provincial and local public-health centers, and the BMA's public-health centers), and some selected reduction in public provisions in conjunction with increased private provisions;

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8 These ideas were derived through a number of brain-storming sessions in the project on "Cost of Public Provisions of Family Planning Services and Role of the Private Sector."

Some of these ideas can fit together to be part of a package of interventions that can be tried out together in certain areas of the country. For example, encouraging more private provision of family planning through sub-contracting will be helped by reduction in government subsidies or selected public exit, and the availability of low cost contraceptive supplies through bulk purchase. Thus, while these ideas are discussed individually below, it is best that the pilot projects carry these out as a package.

5.1 Sub-contracting with private providers.

There appears to be three effective ways of doing so.

5.1a Sub-contracting with certain private clinics, which may be called "designated clinics," for providing both clinical (e.g., male and female sterilization and IUD) and non-clinical (pills) methods. Although the designated clinics should be sub-contracted to provide both clinical and non-clinical methods, the former should be emphasized. This is because of the above findings that indicate that the former are much cheaper when provided by the private sector compared with public sector provision (Section 4). The target population in this case can be medium-and low-income groups. The latter group may include hill-tribers, rural villagers, and urban slum dwellers.

Ideally, the selection of private clinics for sub-contracting should pass through a competitive bidding process to ensure that the MOPH will get the best price and the most efficient private providers. The contract should be signed year by year. If the sub-contractors fail to serve the specified numbers of clients, the contract should be given to new providers in the following year. But since family planning provision is not a highly profitable kind of service, it might not be easy to get suitable clinics involved in the bidding process. As such, the MOPH may select certain clinics -- the so-called "designated clinics" -- particularly in some under-served areas.

The selection of the designated clinics should be based on their reliability and acquaintance with the target population. These clinics would be able to expand the

number of clients by hiring some local people to talk their fellow villagers into receiving family planning services from the clinics.

However, there is a problem associated with this model. The problem is common to every sub-contracting model. That is, it is difficult for the government to check if the sub-contractors actually are able to serve as many clients as specified in the contracts. This problem may be dealt with by inventing some reliable auditing systems, one of which is to require the designated clinics to submit the lists of their clients' names and addresses, together with the telephone numbers (if any), to the MOPH. The MOPH can subsequently make random checks with the clients themselves by call, mail, or visit (in case the clients live in remote rural villages).

5.1b Sub-contracting with certain private drug stores, which may be called "designated drug stores," for providing some non-clinical methods (e.g., pills and condoms). Based on the results described in Section 4 above, private drug stores should be encouraged to provide more pills due to their much lower average price charged per cycle compared to that charged by private clinics as well as to the average public costs. The target population can be at all income groups. The selection of the designated drug stores should take into account their locations and willingness to participate in the program.

5.1c Sub-contracting with labor unions for providing some non-clinical methods (e.g., pills and condoms). The target population would be urban workers who are members of labor unions. The labor unions, who are the sub-contractors in this case, should be able to serve the specified number of worker/clients in a specified number of factories. The worker/clients may pay for the services in the form of membership fees, probably by setting up a certain kind of association (e.g., Acceptors' Association), which is not only aimed at collecting membership fees, but also at raising funds for other purposes. The MOPH should provide some training courses for worker-volunteers to qualify them for the eligibility to sell pills. This is because among private providers in Thailand, except for clinics and drug stores, all the rest would be able to sell pills only

after they have been trained by the MOPH and have subsequently received the so-called "Blue Circle" sign.

In trying out the above sub-contracting ideas, the project should also explore the incorporation of some graduated cut-off limit on sub-contracting for private providers serving the better-off target groups. After a certain period, these private providers should be able to recover full cost through user charges, and will need to rely less on government sub-contracting.

5.2 MOPH's bulk purchase of supplies of some non-clinical methods (e.g., pills and condoms) and reselling them at the same bulk prices plus handling or subsidized price to private providers.

Using this model, contraceptive supplies should be purchased in bulk by the MOPH and resold to the selected private providers at the original bulk prices plus handling. (The MOPH need not do the selling directly, but can get the producers to deal directly with the private distributors.) If the public sector sells to the private sector at cost plus handling then this is *not* a Contraceptive Social Marketing (CSM) program, which uses private sector channels to distribute contraceptive supplies at subsidized prices. Rather, the private providers in this case will have to purchase their own supplies from the MOPH not at subsidized prices, but at the prices which are the summation of handling plus the same prices as those bought in bulk by the MOPH from its five contracting drug companies. This bulk purchase will reduce the costs of providing family planning services incurred to the private providers and allow for more profits, thus creating incentives for them to participate in the program. Not only can the bulk purchase be ordered through the MOPH, it can also be done so through provincial public hospitals, which are more flexible than the MOPH. If the MOPH sells to private providers at subsidized prices then the scheme would fit into the Contraceptive Social Marketing model. For best cost-effectiveness, this latter model is not recommended, unless absolutely necessary for some very poor target areas. The cost saving through bulk purchase should be enough to make the scheme work, even if the public sector sells at cost plus handling to private distributors.

The following are three possible private distribution systems for distributing the bulk purchase of contraceptive supplies.

5.2a Distributing the bulk purchase of some non-clinical supplies (e.g., pills and condoms) by private drug stores. The target population should be set first, which can belong to any low to medium income groups. Since the drug stores can purchase these (generic) pills at bulk rates, they will be able to sell the pills to the target group at special prices, while being able to earn some profits as well.

However, the prices of the bulk purchase charged by the MOPH's contracting drug companies will be reduced substantially with the increase in the supplies of the bulk ordered. The actual price depends on the amount that the drug companies are contracted to supply. Thus, what should be done at the beginning of the project is to get some estimate of the potential number of clients that may be achieved in the project. This will then be used to negotiate with the supplier of the pills and condoms to determine the unit supply costs.

The participating drug stores should keep the lists of names and addresses of their worker-clients to make sure that the target group is served.

5.2b Distributing the bulk purchase of some non-clinical supplies (e.g., pills and condoms) by worker-volunteers. The target group in this case will be factory workers. The advantages of using worker-volunteers as the channel are as follows. First, since the volunteers are workers themselves who act as private providers, it would be easier for them to determine the workers' potential demand for pills to be provided by them. Second, they can easily convince their fellow workers to buy their pills. Third, it would be easier for them to keep the records of worker-clients.

Nevertheless, some training courses have to be provided for these worker-volunteers to qualify them for the eligibility to sell pills. And it would be more difficult in

the first place to search for appropriate workers so as to convince them to act as private providers than to induce drug stores to do so.

5.2c Distributing the bulk purchase of some non-clinical supplies (e.g., pills and condoms) by other sources of private providers (e.g., village or community health volunteers, and community-based drug and retail stores): The target population in this case are the poorer segments in both the rural and urban areas (e.g., in hill-tribe villages, rural villages, and urban slums). Private providers other than drug stores and health personnels have to be trained by the MOPH first so that they will be eligible to sell pills. For the very poor, some public price subsidy may be given.

5.3 Reducing government subsidies or requesting higher contributions from users for family planning services provided by the public sector (e.g., by public hospitals, provincial and local public-health centers, and the BMA's public-health centers), and possible selected exit.

Section 3 has already indicated the great potential in saving net public resource input for family planning through re-pricing. This should be carried out in conjunction with the projects to increase the role of the private sector. It may also be a pre-condition to make increasing the private sector's role a success. If the public sector continues to supply contraceptives at highly subsidized prices, then increases in the role of the private sector may be difficult to achieved. For target groups where the potential to increase the private sector's role is great, selected exit of the public sector may be tried as well.

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